



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,996	11/09/2006	Ferdinand Wiener	06-284	9377
20306	7590	08/19/2009		
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			EXAMINER	
300 S. WACKER DRIVE			LU, JIPING	
32ND FLOOR			ART UNIT	PAPER NUMBER
CHICAGO, IL 60606			3743	
			MAIL DATE	DELIVERY MODE
			08/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,996	Applicant(s) WIENER ET AL.
	Examiner Jiping Lu	Art Unit 3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-3, 5-28 is/are rejected.
- 7) Claim(s) 4 and 29-31 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 6/5/06 & 2/16/07

- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Claim Objections

1. Claim 31 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the abstract is in two paragraphs and the using of phrase "means" in the abstract is improper. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the phrase "plate-like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 5-11, 13-16, 18-21, 24, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055).

Champlin discloses a method and an apparatus for drying treated articles 11, the treated articles 11 being transported along a predefined transport path, with a first gas stream being blown from above onto the treated articles 11, and a second stream of a gaseous drying medium being blown from below onto the treated articles 11. The first and second gas streams are

generated by corresponding fan means 39, 40 and/or damper/flap 59 and regulated in feed lines 53 to respective gas outlet devices 36. The treated articles 11 are continuously conveyed in along the transport path for drying and conveyed out after drying by transport means 12, 13. The gas outlet devices 36 are in the form of a nozzle that includes a nozzle plate 33, 34 having apertures 35 facing towards the transport path. However, Champlin does not show a temperature of the first and/or second gas stream is detected, and the fan means for generating the first and/or second gas stream are controlled in such a way that the temperature detected is regulated to a predefined value. Grenci et al. teach a concept of regulating the gas stream temperature by controlling the fan rotation speed in response to the gas stream temperature detected by the temperature sensor 41 (see col. 1, lines 42-48, col. 7, line 33 to col. 8, line 12, figures 8, 9). The gas stream pressure is also regulated by valve 42 based on detected gas pressure from a pressure sensor 40. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method and apparatus of Champlin to regulate the gas flow temperature by controlling the fan rotation speed based on the detected gas steam temperature and to regulate the pressure based on the detected gas pressure as taught by Grenci et al. in order to more efficiently control the gas stream temperature and pressure and obtain a predictable gas temperature and pressure control result.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 11 above, and further in view of Leap (US 2003/0136019 A1).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claim 12 except for the nozzle apertures include elongated slits. Leap teaches a drying

Art Unit: 3743

apparatus with nozzle apertures including elongated slits 30 same as claimed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include a nozzle with elongated slits as taught by Leap in order to obtain a predictable drying result.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Thome (U. S. Pat. 3,446,273).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claim 17 except for the pressure sensor means arranged between the respective regulating means and the gas outlet device. Thome teaches an apparatus for drying article 7 comprising pressure sensor means 81 arranged between the respective regulating means 83 and the gas outlet devices 11 for detecting a pressure generated by the respective gas flow. The control means 100 controls the regulating means 82 in dependence on the pressure detected by the respective pressure sensor means 81. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include pressure sensor means arranged between the regulating means and the gas outlet device as taught by Thome in order to more efficiently control the gas pressure.

10. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Hochstrasser et al. (U. S. Pat. 4,113,977).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claims 22-23 except for an evacuation duct, an extraction means, a pressure sensor

means and a control means for controlling extraction means based on the pressure detected by the pressure sensor. Hochastrasser et al. teach an apparatus for drying article 54 comprising an evacuation duct 38, an extraction means 82, a pressure sensor 90 and a control means 94 same as claimed. The control means 94 controls the extraction means 84 in such a way that a pressure detected by the pressure sensor means 90 is maintained at a constant predefined value (see Fig. 7). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include an extraction duct, an extraction means, a pressure sensor and a control means for controlling the extraction means based on the pressure detected by the pressure sensor as taught by Hochastrasser et al. in order to more efficiently control the drying.

11. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Champlin (U. S. Pat. 3,048,383) in view of Grenci et al. (U. S. Pat. 5,906,055) as applied to claim 8 above, and further in view of Melgaard (U. S. Pat. 5,263,265).

The apparatus of Champlin as modified by Grenci et al. as above includes all that is recited in claims 25-26 except for an intake duct for fresh gaseous drying medium and control means for controlling the heating means based on the detected gas temperature in the gas feed line. Melgaard teaches an apparatus for drying article 26 comprising an intake duct (at 30.2) for fresh gaseous drying medium and a temperature sensor 32 and at least one gas heating means 22, 24. Control means 34.1 controls the gas heating means in such a way that the temperature detected by the temperature sensor 32 is regulated to a predefined value. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the apparatus of Champlin to include fresh gas intake duct and temperature

control means for controlling the heating means based on gas temperature detected by the temperature sensor as taught by Melgaard in order to more efficiently control the drying.

Allowable Subject Matter

12. Claims 4, 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENNETH RINEHART can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jiping Lu/
Primary Examiner
Art Unit 3743

J. L.